DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-030039

Address: 333 Burma Road **Date Inspected:** 12-Sep-2013

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: Bernie Docena **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS** Tower

Summary of Items Observed:

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) JV job site between the times noted above in order to monitor ABF Quality Control activities and the in process work being performed by ABF production personnel. The following items were observed:

ESW Repair excavation

RWR-201308-004

ESW S-043. Location "T"-Face A:

The QA Inspector observed ABF welder Mike Jimenez (WID-4671) performing excavation of ESW "T" at Face A, Y's= 3090mm,3110mm,3125mm,3170mm,3190mm to verify indications observed during Ultrasonic Testing pulse/echo & pitch/catch. Mr. Jimenez was performing the excavation using an air carbon arc gouging and a grinder. Mr. Jimenez was instructed by ABF QC Inspector Bernie Docena to notify him when indications are visible to allow QC/QA time to inspect the excavation. This repair is being performed from Face A due to rejectable planar indications that were observed & removed on Face B. Location of this repair is as follows: Weld excavated at 25 mm dp- No indications observed.

On this date Mr. Jimenez was removed from the repair location due to unsafe environment conditions with blasting operations in the Tower. ABF Quality Control (QC) Inspector Bernie Docena stated the repair work at this location will continue on 9-13-13.

ESW Repair excavation

RWR-201308-002

ESW N-043, Location "P"-Face A:

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The QA Inspector observed ABF welder Wai Kit Lai (WID-2953) performing excavation of ESW "P" Face A @ Y-3750mm, Y-3770=mm to verify indications observed during Ultrasonic Testing pulse/echo & pitch/catch. The repair information and rejectable indication is described in Request for Weld Repair (RWR) 201308-002. Mr. Lai was performing the excavation using an air carbon arc gouging and a grinder. The repair is being performed on Face A, since a significant planar indication was verified and removed on Face B at this Y location. Mr. Lai was instructed by ABF QC Inspector Bernie Docena to notify him if indications are visible to allow QC/QA time to inspect the excavation. Location of the repair is as follows:

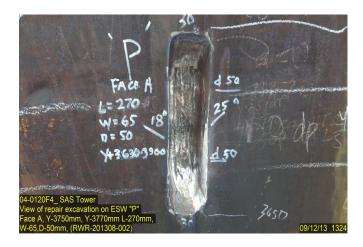
Weld excavated at 50mm dp- No indications observed.

Excavation Length (Y=3630mm~3900mm) L-280mm

W = 65 mm

D=50mm

After grinding to bright metal the QC Inspector performed MT testing of the excavation. The QC Inspector stated the excavation appears to be free of discontinuities and he would complete ABF daily inspection report and magnetic particle testing report to detail the findings. See TL-6028 for additional details on items inspected on this date. Mr. Lai was later observed performing Shield Metal Arc Welding (SMAW) on the repair excavation mentioned above. The preheat was being held to over 350° Fahrenheit using the Miller ProHeat 35 with heat induction blankets. The welder was using 4.0mm diameter electrode (E7018-1 HR4) per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3. ABF QC Inspector Bernie Docena performed welding parameters verifications at random intervals throughout the shift. The welding observed appeared to be in compliance with the WPS noted above.



Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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Inspected By: Adame,Joe Quality Assurance Inspector **Reviewed By:** Riley,Ken QA Reviewer